

**TECHNICAL SPECIFICATION**  
**TITLE: JUSTIFICATION/COST FORM**  
**NO.: TS9090-210A**  
**DATE: JUNE 2002**  
**SUPERSEDES: TS9090-210, dated JUNE 88**



**DISTRIBUTION STATEMENT A**  
**APPROVED FOR PUBLIC RELEASE**  
**DISTRIBUTION UNLIMITED**

---

**Published by**  
**Commander, Naval Sea Systems Command**

---



THIS PAGE INTENTIONALLY LEFT BLANK

## TABLE OF CONTENTS

Section	Title	Page
1.	SCOPE	
1.1	General	1
1.2	Applicability	1
1.3	Exceptions	1
2.	REQUIREMENTS	
2.1	SHIPALT Identification	1
2.2	ESWBS	1
2.3	SHIPALT Brief	1
2.4	Purpose	2
2.5	Justification for Alteration	2
2.6	Material	2
2.7	Applicable Ship Classes	2
2.8	Required Prior or Concurrent Alts	2
2.9	C5I Impact	2
2.10	Drydock Required	2
2.11	SUBSAFE Impact	2
2.12	Distributive Systems Impact	2
2.13	Sys Certification	3
2.14	TEMPEST Impact	3
2.15	Topside Impact	3
2.16	Wt & Mt Impact	3
2.17	AIT Capable	3
2.18	Safety Alt	3
2.19	ILS Affected	3
2.20	Shipboard Stowage Affected	3
2.21	Industrial Stowage Affected	3
2.22	Aviation Impact	3
2.23	ICD's Required	4
2.24	TMA/TMI	4
2.25	ACAT I-IV	4
2.26	Interoperability Alt	4
2.27	Other Systems Interface	4
2.28	IBOM	4
2.29	Category Code	4
2.30	Cost Indicator	5
2.31	Implementation Level Code	5
2.32	Material Costs	5
2.33	Installation Mandays	5
2.34	Design Services Allocation Mandays	5
2.35	TOC	5
2.36	Priority	5

2.37 SAR Preparer	5
2.38 SAR Approver	6
2.39 JCF Submitter	6
2.40 Lead LCM	6
2.41 Engineering Agent Approval	6
2.42 System TPOC	6
2.43 SEA 08 Concurrence	6
2.44 Type Commander Concurrence	6
2.45 Other Concurrence	6
2.46 SPM Approval	7
3. QUALITY ASSURANCE PROVISIONS	7
4. GENERAL INFORMATION	7
FIGURES	
Figure 1 JCF Format	8
Figure 2 Field Authority Table	10



## JCF PREPARATION

**1. SCOPE.** This specification provides criteria for the uniform preparation, processing, and approval of a Justification/Cost Form (JCF).

**1.1 GENERAL.** The JCF is used by the Engineering and Platform Directorates to arrive at a management decision of whether or not to proceed with the development of a Ship Alteration (SHIPALT). The document in general will define the top-level requirements and anticipated costs for the SHIPALT and, when approved and assigned a number, will serve as the authorization to initiate Ship Alteration Record (SAR) development. In accordance with FMP Milestones the JCF shall be submitted not later than A-16 for the availability of the first intended install and the SPM shall adjudicate the JCF no later than A-14. The JCF shall be completed in Microsoft Word © using the Templates found on the FMP Website ([www.FMP.NAVY.MIL](http://www.FMP.NAVY.MIL)).

**1.2 APPLICABILITY.** This specification is applicable to surface ships, surface craft, and submarine JCFs and shall be utilized by all personnel for preparing, processing and maintaining Justification/Cost Forms except as noted herein (see Section 1.3).

**1.3 EXCEPTIONS.** This specification does not apply to:

- Nuclear Propulsion Systems under the cognizance of Naval Sea Systems Command (NAVSEA) 08,
- Special Project Alterations (SPALTs) affecting the Configuration and/or Capabilities of systems and equipments under the cognizance of the Director, Strategic Systems Programs (DIRSSP),
- Aircraft launch and recovery equipment changes under the cognizance of the Naval Air Systems Command (NAVAIR).

**2. REQUIREMENTS.** All of the following requirements apply to the JCF format, as shown in Figure 1. This section provides step-by-step instructions for the preparation of a JCF. The amount of detail to be provided in the JCF will depend on the complexity of the proposed change or modification and should be determined by the submitter. Figure 2 lists all of the data fields and identifies which activity is to provide the data and whether it is required or optional.

**2.1 SHIPALT IDENTIFICATION. (1)** This field will allow the SPM to enter the approved SHIPALT Identification Number. The SHIPALT Number will include the ship class, the number and the title (e.g. K, D, F). This number shall be in the following form: Ship Type (e.g. CVN)- Ship Class (e.g. 68)-SHIPALT Number (e.g. 8767)- SHIPALT Title (e.g. K)- Revision (e.g. 00). This field is mandatory prior to approving a JCF and can only be entered by the Ship Program Manager (SPM).

**2.2 ESWBS (EXPANDED SHIP WORK BREAKDOWN STRUCTURE). (2)** The ESWBS field shall indicate the ESWBS number selected from NAVSEA S9040-AA-IDX-010/SWBS 5D, which is most closely associated with the system, component, or structure being impacted by the alteration. This field is to be completed by the JCF Preparer.

**2.3 SHIPALT BRIEF. (3)** This data field is to be used by the JCF Submitter to enter the

Brief of the alteration. The user shall enter carefully selected words that describe the subject of the proposed change or alteration. This field shall be no more than 30 Characters in length in order to comply with the Navy Data Environment-Navy Modernization (NDE-NM) / FMPMIS Database requirements. Use standard abbreviations as required.

**2.4 PURPOSE. (4)** This data field will allow the JCF submitter to provide a brief description of the alteration. Include references to any other amplifying information or data, if available.

**2.5 JUSTIFICATION FOR ALTERATION. (5)** This data field will allow the JCF Submitter to enter a brief history of the need for this installation. This data shall be provided with reference to the activity and official document that initially requested the change or alteration. (i.e. INSURV, TYCOM, PMI, etc.). Include references to any other amplifying information or data, if available.

**2.6 MATERIAL. (6)** This data field will allow the JCF submitter to enter the top line system configuration identification of the Hardware Systems Command (HSC) material to be installed. The items listed in this field should be the same as those that will be listed in the P1 funding line in NDE-NM/FMPMIS.

**2.7 APPLICABLE SHIP CLASSES. (7)** This data field is a list of all of the ship classes that the alteration is applicable to. The JCF submitter should identify those ships or ship classes to which the change or alteration is applicable (Separate SARs will be prepared for each class of ships). If the individual ships are not noted then it will be assumed that the alteration is applicable to all ships of the class. Along with the ship class the JCF submitter will supply the intended date for the first install, availability of first unit or lead time for delivery of first unit. If there are significant differences in description, material requirements, and/or installation costs among ship classes, a separate JCF shall be developed for each class.

**2.8 REQUIRED PRIOR OR CONCURRENT ALTS. (8)** This data field is to be used by the JCF submitter to list any prior or concurrent alts required by this proposal. This section should include but not be limited to SHIPALTs (both approved and pending), MACHALTs, ORDALTs, Engineering Changes, Field Changes, SPALTs and Technical Directives. If the alteration is unique to a ship class and more than one ship class is identified in section 2.7 above then the ship class shall be identified for the alteration.

**2.9 C5I IMPACT. (9)** This field is an indication (Y/N) of whether or not the change or alteration impacts C5I systems or operation or the ship's combat systems.

**2.10 DRYDOCK REQUIRED. (10)** This field is an indication (Y/N) of whether or not the alteration requires the ship to be drydocked.

**2.11 SUBSAFE IMPACT. (11)** This field is an indication (Y/N) of whether or not accomplishment of the change or alteration impacts a SUBSAFE boundary.

**2.12 DISTRIBUTIVE SYSTEMS IMPACT. (12)** This field is an indication (Y/N) of

whether or not Ship's Critical Distributive Systems (SCDS) are impacted by the accomplishment of the change or alteration.

**2.13 SYS CERTIFICATION. (13)** This field is an indication (Y/N) of whether or not accomplishment of the change or alteration requires certification of a combat system.

**2.14 TEMPEST IMPACT. (14)** This field is an indication (Y/N) whether or not accomplishment of the change or alteration requires TEMPEST certification.

**2.15 TOPSIDE IMPACT. (15)** This field is an indication (Y/N) whether or not accomplishment of the change or alteration impacts the topside areas of applicable ships. This includes, but is not limited to, arrangement changes, changes in firing cutout zones, RADHAZ, HERO, EMI or RADAR Cross Section.

**2.16 WT&MT IMPACT. (16)** This field is an indication (Y/N) of whether or not accomplishment of the change or alteration impacts the weight and moment of applicable ships.

**2.17 AIT CAPABLE. (17)** This field is an indication (Y/N) of whether or not accomplishment of this alteration is within the capability of an Alteration Installation Team (AIT). If this field is marked as "Yes" then the installation mandays (see 2.32) should be the installation mandays required by the AIT.

**2.18 SAFETY ALT. (18)** This checkbox is an indication (Y/N) of whether or not the change or alteration is specifically intended to correct a pre-existing safety problem or provide a safe operating or living environment. If this box is checked then the Category Code (See 2.26) must be either a 1 or 2.

**2.19 ILS AFFECTED. (19)** This field is an indication (Y/N) whether or not installation of this alteration will affect Integrated Logistics Support (ILS). This will include but not be limited to any update/changes to any existing Technical Manuals, new Technical Manuals, Supply Support (e.g., I&C's, MAMs, Onboard Spares, etc.), Maintenance Index Pages (MIPs), Maintenance Requirements Cards (MRCs), Technical Repair Standards (TRSs), Class Maintenance Plans (CMPs), Intermediate Repair Standards (IRSs), any changes or additions to any existing training plan, new training plan, special tools, alignment jigs, test equipment, any changes or additions to any existing SRD's or development of new SRD's for equipment installation and certification of this alteration.

**2.20 SHIPBOARD STOWAGE AFFECTED. (20)** This field is an indication (Y/N) whether or not installation of this alteration will require any use of shipboard Stowages.

**2.21 INDUSTRIAL STOWAGE AFFECTED. (21)** This field is an indication (Y/N) whether or not installation of this alteration will require any use of industrial Stowages.

**2.22 AVIATION IMPACT. (22)** This field is an indication (Y/N) whether or not accomplishment of the change or alteration impacts air operations, air space, or any aviation system or facility onboard ship(s). This includes, but is not limited to: flight/hangar deck

operations; manning; aircraft and weapons stowage, movement, and handling; aviation related spaces (e.g., Primary Flight Control, Flight Deck Control, CATCC, Squadron Ready Rooms, AIMD, etc.); Carrier Suitability (e.g., airwake, ship motion, etc.); Air Traffic Control; Aviation Support Equipment and/or services. It also includes modifying NAVAIR systems or embedded ship systems affecting NAVAIR system location or performance (e.g., piping, lighting, or electrical)

**2.23 ICD'S REQUIRED. (23)** This field is used to indicate (Y/N) whether or not planning for this change or alteration will require the PARM to deliver ICD's and to enter the date when these ICD's will be available.

**2.24 TMA/TMI. (24)** This field is used to indicate (Y/N) whether or not this change or alteration is a Top Management Attention (TMA) or Top Management Interest (TMI) item.

**2.25 ACAT I-IV. (25)** This field is an indication (Y/N) whether or not this change or alteration will install a system that has been designated an Acquisition Category I through IV as defined in DOD Regulation 5000.2 series, (Mandatory Procedures for Major Defense Acquisition Programs and Major Automated Information System Programs).

**2.26 INTEROPERABILITY ALT. (26)** This field is an indication (Y/N) of whether or not the change or alteration is required for battle group interoperability.

**2.27 OTHER SYSTEMS INTERFACE. (27)** This field is for the JCF submitter to list any other interface to ships systems other than those covered in the Y/N check boxes above (Sections 2.9 through 2.23). This includes impacts such as Weapons storage (either temporary or permanent) or Fuel offload.

**2.28 IBOM. (28)** This field is for the JCF submitter to fill in the NDE-NM / FMPMIS Alteration Bill of Material Source (IBOM) Code.

<u>CODE</u>	<u>DESCRIPTION</u>
0	SOURCE OF BOM NOT SPECIFIED
1	BOM NOT YET DEVELOPED
2	JUSTIFICATION COST FORM (JCF)
3	SHIPALT RECORD (SAR) BOM
4	SHIP INSTALLATION DRAWING (SID) BOM
5	HULL UNIQUE MATERIAL
6	BOM NOT REQUIRED

**2.29 CATEGORY CODE. (29)** This field is for the JCF submitter to fill in the NDE-NM / FMPMIS Category Code as listed below.

<u>CODE</u>	<u>DESCRIPTION</u>
0	PRIORITY LEVEL NOT ESTABLISHED
1	MANDATORY AND SAFETY
2	RELIABILITY AND MAINTAINABILITY (PRIMARY)

- 3 PRIMARY MISSION SYSTEM MODERNIZATION
- 4 RELIABILITY AND MAINTAINABILITY (SEC) MISSION AREA
- 5 SECONDARY MISSION AREA MODERNIZATION
- 6 MISSION SUPPORT

**2.30 COST INDICATOR. (30).** This field is for the JCF submitter to fill in the NDE-NM / FMPMIS Cost Indicator as listed below.

<u>CODE</u>	<u>DESCRIPTION</u>
A	DETAILED COST ESTIMATE (±10%)
C	BUDGET QUALITY ESTIMATE (±15%)
D	FEASIBILITY ESTIMATE (±20%)
F	BALLPARK ESTIMATE (±40%)
X	DIRECT OR MODIFIED ESTIMATE (DIRECTED BY CUSTOMER)

**2.31 IMPLEMENTATION LEVEL CODE. (31)** This field is for the JCF submitter to fill in the NDE-NM / FMPMIS Implementation Level Code as listed below.

<u>CODE</u>	<u>DESCRIPTION</u>
D	DEPOT
I	IMA/TENDER
T	AIT
F	SHIP'S FORCE

**2.32 MATERIAL COSTS. (32)** This field is used to enter the projected cost of any SHIPALT material that is requisitioned, fabricated, or locally procured by the Naval Supervising Activity (NSA) or the Installing Activity. This should be exclusive of the Headquarters Centrally Provided Material (HCPM). The material should not be entered in this field.

**2.33 INSTALLATION MANDAYS. (33)** This field will be used to provide an estimated installation cost in mandays for accomplishing the change or alteration. This estimate will be Rough Order of Magnitude (ROM) estimate.

**2.34 DESIGN SERVICES ALLOCATION MANDAYS. (34)** This field will be used to provide an estimated DSA cost in mandays for planning the change or alteration. This estimate will be Rough Order of Magnitude (ROM) estimate.

**2.35 TOC. (35)** This field is used to list the estimated Total Ownership Costs (TOC) for the change or alteration. This cost should be expressed in manhours and can be either positive or negative.

**2.36 PRIORITY. (36)** This field shall contain the TYCOMs priority for the JCF.

**2.37 SAR PREPARER. (37)** This field is used to designate the activity that will be assigned by the SPM to prepare the Ship Alteration Record. The SAR Preparer will normally be the Planning Yard or the PARM. This field is to be completed by the SPM.

**2.38 SAR APPROVER. (38)** This field is used to designate the activity that will be delegated the authority to approve the SAR. The SPM can designate any activity as the SAR Approver for any SHIPALT (e.g. K or D). Once designated that activity has the full authority to review and approve the SAR. This field is to be filled in by the SPM.

**2.39 JCF SUBMITTER. (39)** This field is to be used by the JCF Submitter to enter the Technical Point of Contact (TPOC) of the JCF Submitter. This field will consist of two parts: the first is the activity of the submitter; the second is for the Name and Phone number of the submitter.

**2.40 LEAD LCM. (Logistics) (40)** This field is to be used for entering the logistics Life-Cycle Manager for the system or equipment being installed. This field will consist of two parts: the first is for the activity of the Lead LCM; the second is for the Name and Phone number of the Point of Contact (POC) to be entered.

**2.41 ENGINEERING AGENT APPROVAL. (41)** This field is to be used by the SPM to fill the cognizant Engineering Agent Lead Engineer who has primary responsibility for the alteration once engineering approval has been obtained. This field will consist of two parts: the first is for the activity of the Engineering Agent; the second is for the Name and Phone number of the POC.

**2.42 SYSTEM TPOC. (42)** This field is to be used by the JCF Submitter to enter the Technical Point of Contact for the system covered by the JCF. This field will consist of two parts: the first is for the activity of the System TPOC; the second is for the Name and Phone number of the TPOC.

**2.43 SEA 08 CONCURRENCE. (43)** This field is for the SPM to enter the Name and Phone number of the 08 POC once his/her approval has been obtained. For changes affecting nuclear propulsion areas as listed in NAVSEA Instruction 9210.4, SEA 08 concurrence is required on the JCF. This field is mandatory for the SPM to enter data. The SPM can either enter the SEA 08 POC's name with the (S) and telephone number to indicate the signature is on file or N/A for JCFs with no nuclear propulsion interface.

**2.44 TYPE COMMANDER CONCURRENCE. (44)** This field is for the SPM to enter the TYCOM POC once his/her approval has been obtained. This field is mandatory for the SPM to enter data. The SPM can either put the TYCOM POC's name with the (S) and telephone number to indicate the signature is on file or N/A for where no TYCOM concurrence is required. This field will consist of two parts the first is for the appropriate TYCOM or N/A the second is for the Name and Phone number of the POC to be entered.

**2.45 OTHER CONCURRENCE. (45)** This field is for the SPM to enter the Name and Phone number of any other organization whose concurrence is required. The SPM shall enter the activities (SPAWAR, NAVAIR) POC's name with the (S) and indicate the signature is on file. This field has two columns the first is for the concurring Activity the second is for the Name and Phone number of the POC.

**2.46 SPM APPROVAL. (46)** This field is to be used by the SPM to fill in the name, code, and telephone number of the cognizant NAVSEA/PEO Lead Technical Code Engineer who has primary responsibility for the alteration. This field consists of two parts: the first is for the SPM's activity; the second is for the Name and Phone number of the POC to be entered.

**3. QUALITY ASSURANCE PROVISIONS.** The SPM shall ensure that the JCF conforms to the requirements of Section 2 above.

**4. GENERAL INFORMATION.** Any additions, deletions, or changes to this specification must be made under the auspices of the FMP Conference.

FIGURE 1

<b>JUSTIFICATION/COST FORM</b>	
SHIPALT IDENTIFICATION: (1)	ESWBS: (2)
BRIEF: (30 Characters Max): (3)	
PURPOSE: (4)	
JUSTIFICATION FOR ALTERATION: (5)	
MATERIAL: (6)	
APPLICABLE SHIPS: (7)	
REQUIRED PRIOR OR CONCURRENT ALTS: (8)	
C5I IMPACT: (Y/N) (9)	DRYDOCK REQUIRED: (Y/N) (10)
SUBSAFE IMPACT: (Y/N) (11)	DISTRIBUTIVE SYSTEMS IMPACT: (Y/N) (12)
SYS CERTIFICATION: (Y/N) (13)	TEMPEST IMPACT: (Y/N) (14)
TOPSIDE IMPACT: (Y/N) (15)	WT & MT IMPACT: (Y/N) (16)
AIT CAPABLE: (Y/N) (17)	SAFETY ALT: (Y/N) (18)
ILS AFFECTED: (Y/N) (19)	SHIPBOARD STOWAGE AFFECTED: (Y/N) (20)
INDUSTRIAL STOWAGE AFFECTED: (Y/N) (21)	AVIATION IMPACT: (Y/N) (22)
ICD 'S REQUIRED: (23)	TMA/TMI: (Y/N) (24)
ACAT I-IV (Y/N) (25)	INTEROPERABILITY ALT: (Y/N) (26)
OTHER SYSTEMS INTERFACE: (27)	
IBOM: (28)	CATEGORY CODE: (0-6) (29)
COST INDICATOR: (A,C,D,F,X) (30)	IMPLEMENTATION LEVEL CODE: (D,I,T,F) (31)
MATERIAL COSTS: (32)	INSTALLATION MANDAYS: (33)
DSA MANDAYS: (34)	TOC: (35)
PRIORITY: (36)	
SAR PREPARER: (37)	
SAR APPROVER: (38)	
JCF SUBMITTER: (39)	
LEAD ICM (Logistics): (40)	
ENGN DIR: (41)	
SYSTEM TPOC (42)	
SEA 08: (43)	
TYCOM: (44)	
OTHER: (45)	
SPM: (46)	



## FIELD AUTHORITY TABLE

FIELD	DESCRIPTION	AUTHORITY
1	SHIPALT IDENTIFICATION	MANDATORY SPM
2	ESWBS	MANDATORY SUBMITTER
3	SHIPALT BRIEF	MANDATORY SUBMITTER
4	PURPOSE	MANDATORY SUBMITTER
5	JUSTIFICATION FOR ALTERATION	MANDATORY SUBMITTER
6	MATERIAL	MANDATORY SUBMITTER
7	APPLICABLE SHIP CLASSES	MANDATORY SUBMITTER
8	REQUIRED PRIOR OR CONCURRENT ALTS	MANDATORY SUBMITTER
9	CSI IMPACT	MANDATORY SUBMITTER
10	DRYDOCK REQUIRED	MANDATORY SUBMITTER
11	SUBSAFE IMPACT	MANDATORY SUBMITTER
12	DISTRIBUTIVE SYSTEMS IMPACT	MANDATORY SUBMITTER
13	SYS CERTIFICATION	MANDATORY SUBMITTER
14	TEMPEST IMPACT	MANDATORY SUBMITTER
15	TOPSIDE IMPACT	MANDATORY SUBMITTER
16	WT & MT IMPACT	MANDATORY SUBMITTER
17	AIT CAPABLE	MANDATORY SUBMITTER
18	SAFETY ALT	MANDATORY SUBMITTER
19	ILS AFFECTED	MANDATORY SUBMITTER
20	SHIPBOARD STOWAGE AFFECTED	MANDATORY SUBMITTER
21	INDUSTRIAL STOWAGE AFFECTED	MANDATORY SUBMITTER
22	AVIATION IMPACT	MANDATORY SUBMITTER
23	ICD'S REQUIRED	MANDATORY SUBMITTER
24	TMA/TMI	MANDATORY SUBMITTER
25	ACAT I-IV	MANDATORY SUBMITTER
26	INTEROPERABILITY ALT	MANDATORY SUBMITTER
27	OTHER SYSTEMS INTERFACE	OPTIONAL SUBMITTER
28	IBOM	MANDATORY SUBMITTER
29	CATEGORY CODE	MANDATORY SUBMITTER
30	COST INDICATOR	MANDATORY SUBMITTER
31	IMPLEMENTATION LEVEL CODE	MANDATORY SUBMITTER
32	MATERIAL COSTS	MANDATORY SUBMITTER
33	INSTALLATION MANDAYS	MANDATORY SUBMITTER
34	DSA MANDAYS	MANDATORY SUBMITTER
35	TOC	MANDATORY SUBMITTER
36	PRIORITY	OPTIONAL SUBMITTER
37	SAR PREPARER	MANDATORY SPM
38	SAR APPROVER	MANDATORY SPM
39	JCF SUBMITTER	MANDATORY SUBMITTER
40	LEAD LCM (Logistics)	MANDATORY SUBMITTER
41	ENGINEERING AGENT APPROVAL	MANDATORY SPM
42	SYSTEM TPOC	MANDATORY SUBMITTER
43	08 CONCURRENCE	MANDATORY SPM
44	TYPE COMMANDER CONCURRENCE	MANDATORY SPM
45	OTHER CONCURRENCE	OPTIONAL SPM
46	SHIP PROGRAM MANAGER APPROVAL	MANDATORY SPM

**FIGURE 2**